

IN THE CLAIMS:

Claims 3-17 were previously withdrawn. Claims 3-10 and 15-17 have been cancelled herein without prejudice or disclaimer. Claims 1, 2, 11-12, and 18-22 have been amended herein. All of the currently pending claims 1-22 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently Amended) An isolated phosphorylated polypeptide having protein methylglyoxal modifying activity, wherein the isolated polypeptide comprises the amino acid sequence of SEQ ID NO:1, and wherein the isolated phosphorylated polypeptide is phosphorylated at one or more positions selected from the group consisting of Ser 8, Ser 21, Ser 26 and Thr 107 of SEQ ID NO:1.

2. (Currently Amended) ~~The~~ An isolated phosphorylated polypeptide having protein methylglyoxal modifying activity ~~of claim 1,~~ wherein the isolated polypeptide comprises an amino acid sequence of SEQ ID NO: 1, and wherein the isolated phosphorylated polypeptide is phosphorylated at one or more positions selected from the group consisting of Ser 45 and Thr 98.

3-10. (Cancelled)

11. (Currently Amended) A process for modifying glyoxalase I comprising: phosphorylating ~~the glyoxalase I~~ a polypeptide comprising the amino acid sequence of SEQ ID NO:1 with PKA, and wherein the polypeptide is phosphorylated at one or more positions selected from the group consisting of Ser 8, Ser 21, Ser 26, Thr 107, Ser 45, and Thr 98 of SEQ ID NO:1.

12. (Currently Amended) A process for modulating methylglyoxal-modification of proteins in a cell comprising:
contacting the cell with a means for phosphorylating ~~a glyoxalase I~~ a polypeptide comprising the

amino acid sequence of SEQ ID NO:1 associated with the cell, and wherein the polypeptide is phosphorylated at one or more positions selected from the group consisting of Ser 8, Ser 21, Ser 26, Thr 107, Ser 45, and Thr 98 of SEQ ID NO:1.

13. (Original) The process according to claim 12, wherein the means for phosphorylating a glyoxalase I is selected from the group consisting of TNF, PKA, or combinations thereof.

14. (Original) The process according to claim 12, wherein the means for phosphorylating a glyoxalase I is TNF.

15-17 (Cancelled).

18. (Currently Amended) The isolated phosphorylated polypeptide of claim 1, produced by ~~the~~ a process comprising:
treating a mammalian cell with TNF.

19. (Currently Amended) The isolated phosphorylated polypeptide of claim 2, wherein the isolated phosphorylated polypeptide is further phosphorylated at one or more positions selected from the group consisting of Ser 8, Ser 21, Ser 26, and Thr 107 of SEQ ID NO:1.

20. (Currently Amended) The isolated phosphorylated polypeptide of claim 2, ~~wherein the isolated phosphorylated polypeptide is phosphorylated at one or more positions selected from the group consisting of Ser 45 and Thr 98~~ produced by a process comprising:
treating a mammalian cell with TNF.

21. (Currently Amended) An isolated phosphorylated polypeptide having glyoxalase I activity, wherein the isolated polypeptide comprises the amino acid sequence of SEQ ID NO:1, and wherein the isolated phosphorylated polypeptide is phosphorylated at one or more positions

selected from the group consisting of Ser 8, Ser 21, Ser 26, Thr 107, Ser 45, and Thr 98 of SEQ ID NO:1.

22. (Currently Amended) The isolated phosphorylated polypeptide of claim-~~22~~ 21, produced by ~~the~~ a process comprising:
treating a mammalian cell with TNF.